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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,915	07/28/2003	Koichi Yoshimura	116673	3625
25944	7590	01/30/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			PHAM, MICHAEL	
			ART UNIT	PAPER NUMBER
			2167	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/627,915	YOSHIMURA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael D. Pham	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/28/2003</u> .                                                          | 6) <input type="checkbox"/> Other: _____                                    |

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**Detailed Action**

1. Claims 1 - 21 have been examined.
2. Claims 1 - 21 are pending.
3. Claims 1 - 21 are rejected as detailed below.

***Priority***

Application has claimed Foreign priority and thus has been examined with a priority date of 12/19/2002.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claims 1-7, 15, and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6950847 by Harrisville-Wolff (hereafter Wolff) in view of U.S. Patent 5761496 by Hattori (hereafter Hattori).***

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**Claim 1:**

**Wolff discloses, a service retrieval apparatus which provides a retrieval service for retrieving a service provided by a server connected to a network in response to a request from a client and returning a result of the retrieval [Wolff, Abstract, a service providing system], comprising:**

**retrieval means which sets retrieval conditions according to the request from said client and retrieves a service based upon the set retrieval conditions [Col. 6 lines 17-25, Wolff. The service requests (service request coming from client) typically will include information indicating (i.e. condition) the type of service desired or the functions the service preferably will perform. The service request information preferably is adequate to allow the service manager 160 to match or filter the service requests against services that have been registered with the service manager 160 and are known to be available.]; and**

However, Wolff does not explicitly disclose a

**retrieval result judgment means which judges whether or not a result of the retrieval by said retrieval means satisfies judgment criteria set in advance, wherein, when it is judged by said retrieval result judgment means that the retrieval result does not satisfy the judgment criteria, said retrieval means changes the retrieval conditions and performs retrieval again.**

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On the other hand, Hattori discloses using retrieval parameters which reflect the user's retrieval strategy (judgment), the system modifies parameters, generates a new retrieval expression and, based on this retrieval expression, executes retrieval again so that the user's retrieval strategy and background knowledge can be reflected (Hattori, Col. 7 lines 25-35), and further discloses a retrieval result obtained by information retrieval on a trial and error basis shows that the condition is "less restrictive" or "too restrictive". A "less restrictive" condition returns more data items than are expected by the user (Hattori, Col. 1 lines 38-47).

Therefore it would have been obvious to one of ordinary skill at the time the invention was made to modify Wolff to include the steps of **retrieval result judgment means which judges whether or not a result of the retrieval by said retrieval means satisfies judgment criteria set in advance, wherein, when it is judged by said retrieval result judgment means that the retrieval result does not satisfy the judgment criteria, said retrieval means changes the retrieval conditions and performs retrieval again**, based on the disclosure of Hattori for the purpose of the "...specify[ing] an appropriate retrieval condition which precisely indicates what information he really wants and what he knows about the information to be retrieved." (Hattori, Col. 2 lines 10-12) This would solve the problem such as a "less restrictive" condition returning more data items than are expected by the user, In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items (Hattori, Col. 1 lines 38-47).

**Claim 2:**

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Wolff modified with **Hattori** discloses **the service retrieval apparatus according to claim 1 and furthermore disclose, wherein, when it is judged by said retrieval result judgment means that the number of services included in the retrieval result has not reached the lower limit number of services set as the judgment criteria, said retrieval means changes the retrieval conditions so as to be wider and performs retrieval again** [Hattori discloses using retrieval parameters which reflect the user's retrieval strategy (judgment), the system modifies parameters, generates a new retrieval expression and, based on this retrieval expression, executes retrieval again so that the user's retrieval strategy and background knowledge can be reflected (Hattori, Col. 7 lines 25-35), and further discloses a retrieval result obtained by information retrieval on a trial and error basis shows that the condition is "less restrictive" or "too restrictive". A "less restrictive" condition returns more data items than are expected by the user (Hattori, Col. 1 lines 38-47). ].

**Claim 3:**

Wolf modified with Hattori disclose **the service retrieval apparatus according to claim 2, wherein said retrieval means performs retrieval with respect to a new retrieval range excluding the range for which retrieval has already been performed** [Hattori, Col. 1 lines 38-47. "less restrictive" condition returning more data items than are expected by the user. In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items. And a "too restrictive" condition returning less data items than are expected by the user.”

(i.e. retrieves at different ranges with different retrievals.) ].

**Claim 4:**

Wolff modified with Hattori disclose **the service retrieval apparatus according to claim 1, wherein, when it is judged by said retrieval result judgment means that the number of services included in the retrieval result has exceeded the upper limit number of services set as the judgment criteria, said retrieval means changes the retrieval conditions so as to be narrower and performs retrieval again** [Hattori, Col. 1 lines 38-47. "less restrictive" condition returning more data items than are expected by the user. In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items.] .

**Claim 5:**

Wolff modified with Hattori, disclose **the service retrieval apparatus according to claim 4, wherein said retrieval means performs retrieval with respect to a new retrieval range excluding the range for which retrieval has already been performed** [Hattori, Col 7 lines 25-35. new retrieval of results based on new conditions] .

**Claim 6:**

Wolff modified with Hattori **the service retrieval apparatus according to claim 4, wherein said retrieval means performs narrowing-down retrieval of the range for which retrieval has already been performed** [Hattori, Col. 1 lines 38-47, "less restrictive" condition returning more data items than are expected by the user. In this case, the user must specify a more

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restrictive retrieval condition to reduce the number of data items.].

**Claim 7:**

Wolff modified with Hattori disclose **the service retrieval apparatus according to claim 1, further comprising reply means which rearranges the result of the retrieval by the retrieval means based upon values with respect to attribute items included in the retrieval conditions, and then returns the retrieval result to said client** [Hattori, Col. 11 lines 39-61.

The retrieval request input section 110 has a retrieval request consisting of an attribute, the value of the attribute (keyword), and its importance degree. There exists a conceptual hierarchy 310 of the attribute 1 as the background knowledge corresponding to the attribute 1 and, in the conceptual hierarchy 310, there are low level attribute values--"apple", "strawberry", and "pear"--of the attribute value "fruit" therefore there is an arrangement of values of attributes.].

**Claim 15:**

Wolff discloses **a client apparatus which retrieves a service provided by a server connected to a network in response to a service retrieval request and sends the service retrieval request to a service retrieval apparatus providing a retrieval service for returning a result of the retrieval** [Wolff, Abstract, service providing system], comprising:

**retrieval result receiving means which receives a retrieval result sent from said service retrieval apparatus in response to the service retrieval request** [Wolff, Col. 3 lines 29-33.

The client system includes a virtual service mechanism for registering as a recipient with the



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service manager, transmitting the service requests, and recognizing and executing the service proxies received in response to the service requests (i.e. has received retrieval results from service requests).];

Wolff does not explicitly disclose **selection means which selects an attribute item, magnitudes of which can be compared, from attribute items included in retrieval conditions of the service; and output means which rearranges a plurality of items of service information included in the retrieval result based upon values of the attribute items selected by said selection means included in each item of service information to output the service information.**

However, Hattori discloses [Hattori, Col. 11 lines 39-61. The retrieval request input section 110 has a retrieval request consisting of an attribute, the value of the attribute (keyword), and its importance degree. There exists a conceptual hierarchy 310 of the attribute 1 as the background knowledge corresponding to the attribute 1 and, in the conceptual hierarchy 310, there are low level attribute values--"apple", "strawberry", and "pear"--of the attribute value "fruit" therefore there is an arrangement of values of attributes.]

Therefore it would have been obvious to one of ordinary skill in the art to have modified Wolff to include the steps of having **selection means which selects an attribute item, magnitudes of which can be compared, from attribute items included in retrieval conditions of the service; and output means which rearranges a plurality of items of service information included in**

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**the retrieval result based upon values of the attribute items selected by said selection means included in each item of service information to output the service information** based on the disclosure of Hattori for the purpose of the "...specify[ing] an appropriate retrieval condition which precisely indicates what information he really wants and what he knows about the information to be retrieved." (Hattori, Col. 2 lines 10-12) This would solve the problem such as a "less restrictive" condition returning more data items than are expected by the user, In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items (Hattori, Col. 1 lines 38-47).

**Claim 16:**

Wolff discloses **a service retrieval method which retrieves a service provided by a server connected to a network in response to a request from a client and returns a result of the retrieval** [Wolff, Abstract service providing system], **comprising:**

**a retrieval step of setting retrieval conditions in response to a request of the client and retrieves a service based upon the set retrieval conditions**[Col. 6 lines 17-25, Wolff. The service requests (service request coming from client) typically will include information indicating (i.e. condition) the type of service desired or the functions the service preferably will perform. The service request information preferably is adequate to allow the service manager 160 to match or filter the service requests against services that have been registered with the service manager 160 and are known to be available.];

However, Wolff does not explicitly disclose a **retrieval result judgment step of judging whether or not a result of the retrieval by said retrieval step satisfies judgment criteria set in advance; and, a reply step of returning the result of the retrieval by said retrieval means to said client, wherein, when it is judged by said retrieval result judgment means that the retrieval result does not satisfy the judgment criteria, said retrieval means changes the retrieval conditions and performs retrieval again.**

On the other hand, Hattori discloses using retrieval parameters which reflect the user's retrieval strategy (judgment), the system modifies parameters, generates a new retrieval expression and, based on this retrieval expression, executes retrieval again so that the user's retrieval strategy and background knowledge can be reflected (Hattori, Col. 7 lines 25-35), and further discloses a retrieval result obtained by information retrieval on a trial and error basis shows that the condition is "less restrictive" or "too restrictive". A "less restrictive" condition returns more data items than are expected by the user (Hattori, Col. 1 lines 38-47).

Therefore it would have been obvious to one of ordinary skill at the time the invention was made to modify Wolff to include the step of **retrieval result judgment step of judging whether or not a result of the retrieval by said retrieval step satisfies judgment criteria set in advance; and, a reply step of returning the result of the retrieval by said retrieval means to said client, wherein, when it is judged by said retrieval result judgment means that the retrieval result does not satisfy the judgment criteria, said retrieval means changes the retrieval conditions and performs retrieval again,** based on the disclosure of Hattori for the purpose of

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the "...specify[ing] an appropriate retrieval condition which precisely indicates what information he really wants and what he knows about the information to be retrieved." (Hattori, Col. 2 lines 10-12) This would solve the problem such as a "less restrictive" condition returning more data items than are expected by the user, In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items (Hattori, Col. 1 lines 38-47).

**Claim 17:**

Wolf modified with Hattori disclose **the service retrieval method according to claim 16 and furthermore disclose, wherein, when it is judged by said retrieval result judgment step that the number of services included in the retrieval result has not reached the lower limit number of services set as the judgment criteria, said retrieval step changes the retrieval conditions so as to be wider and performs retrieval again** [Hattori discloses using retrieval parameters which reflect the user's retrieval strategy (judgment), the system modifies parameters, generates a new retrieval expression and, based on this retrieval expression, executes retrieval again so that the user's retrieval strategy and background knowledge can be reflected (Hattori, Col. 7 lines 25-35), and further discloses a retrieval result obtained by information retrieval on a trial and error basis shows that the condition is "less restrictive" or "too restrictive". A "less restrictive" condition returns more data items than are expected by the user (Hattori, Col. 1 lines 38-47). ].

**Claim 18:**

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Wolf modified with Hattori disclose **the service retrieval method according to claim 17, wherein said retrieval means performs retrieval with respect to a new retrieval range excluding the range for which retrieval has already been performed** [Hattori, Col. 1 lines 38-47. "less restrictive" condition returning more data items than are expected by the user. In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items. And a "too restrictive" condition returning less data items than are expected by the user." (i.e. retrieves at different ranges with different retrievals.) ].

**Claim 19:**

Wolff modified with Hattori discloses **the service retrieval method according to claim 16, wherein, when it is judged by said retrieval result judgment step that the number of services included in the retrieval result has exceeded the upper limit number of services set as the judgment criteria, said retrieval step changes the retrieval conditions so as to be narrower and performs retrieval again** [Hattori, Col. 1 lines 38-47, "less restrictive" condition returning more data items than are expected by the user. In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items.]

**Claim 20:**

Wolff modified with Hattori discloses **the service retrieval method according to claim 19, wherein said retrieval step performs narrowing-down retrieval of the range for which retrieval has already been performed** [Hattori, Col. 1 lines 38-47, "less restrictive" condition returning more data items than are expected by the user. In this case, the user must specify a

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more restrictive retrieval condition to reduce the number of data items.]

**Claim 21:**

Wolff modified with Hattori discloses **the service retrieval method according to claim 16, further comprising a reply step of rearranging the result of the retrieval by said retrieval step based upon values with respect to attribute items included in the retrieval conditions, and then returns the retrieval result to said client** [Hattori, Col. 11 lines 39-61. The retrieval request input section 110 has a retrieval request consisting of an attribute, the value of the attribute (keyword), and its importance degree. There exists a conceptual hierarchy 310 of the attribute 1 as the background knowledge corresponding to the attribute 1 and, in the conceptual hierarchy 310, there are low level attribute values--"apple", "strawberry", and "pear"--of the attribute value "fruit" therefore there is an arrangement of values of attributes.].

*Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6950847 by Harrisville-Wolff (hereafter Wolff) and U.S. Patent 5761496 by Hattori (hereafter Hattori) as applied to claims 1-7 and 15-21 above and in further view of Background of Application (hereafter Background).*

**Claim 8:**

Wolff discloses **a plurality of service retrieval apparatuses which provide a retrieval service for retrieving a service provided by a server connected to a network in response to a**

**request from a client and returning a result of the retrieval** [Wolff, Figure 1, service provider(server) connected to client system through network.], comprising:

However, Wolff does not **explicitly disclose retrieval result judgment means which judges whether or not a result of the retrieval by said retrieval means satisfies judgment criteria set in advance, wherein, when it is judged by said retrieval result judgment means that the retrieval result does not satisfy the judgment criteria, said retrieval means changes the retrieval range corresponding to the request from said client and performs retrieval again.**

On the other hand, Hattori discloses using retrieval parameters which reflect the user's retrieval strategy (judgment), the system modifies parameters, generates a new retrieval expression and, based on this retrieval expression, executes retrieval again so that the user's retrieval strategy and background knowledge can be reflected (Hattori, Col. 7 lines 25-35), and further discloses a retrieval result obtained by information retrieval on a trial and error basis shows that the condition is "less restrictive" or "too restrictive". A "less restrictive" condition returns more data items than are expected by the user (Hattori, Col. 1 lines 38-47).

Therefore it would have been obvious to one of ordinary skill at the time the invention was made to modify Wolff to include the steps of **retrieval result judgment means which judges whether or not a result of the retrieval by said retrieval means satisfies judgment criteria set in advance, wherein, when it is judged by said retrieval result judgment means that the retrieval result does not satisfy the judgment criteria, said retrieval means changes the**

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**retrieval range corresponding to the request from said client and performs retrieval again,**  
based on the disclosure of Hattori for the purpose of the "...specify[ing] an appropriate retrieval condition which precisely indicates what information he really wants and what he knows about the information to be retrieved." (Hattori, Col. 2 lines 10-12) This would solve the problem such as a "less restrictive" condition returning more data items than are expected by the user, In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items (Hattori, Col. 1 lines 38-47).

However Wolff modified with Hattori does not explicitly teach

**a service information database which stores service information including address information and installation position information of said server and attribute information of a service provided by said server.**

**stores address information and installation position information of a service retrieval apparatus with each sub-network included in a retrieval range;**

**retrieval range setting means which, by retrieving said service retrieval apparatus database based upon inputted retrieval conditions, specify one or more service retrieval apparatuses conforming to the retrieval conditions and set sub-networks, which correspond to said specified service retrieval apparatuses, as a retrieval range for the request;**



**retrieval means which causes said retrieval range setting means to set a range for retrieval in response to a request from said client and requests its own service retrieval apparatus or other service retrieval apparatuses included in the set retrieval range to perform retrieval to thereby execute service retrieval**

On the other hand, applicant has admitted within the Background of the Application (Page 3- lines 20-28 to page 4 lines 1-2) that “information such as service locations and service attributes obtained as a result of the retrieval is provided to a user.”

Background, page 4 lines 11-20, a range to be a target of retrieval in the network is set, disclosed service information is retrieved in the set retrieval range, and information such as service locations and service attributes obtained as a result of the retrieval is provided to a user.

Background, page 4 lines 11-20, depending upon retrieval conditions designated by a user, it is possible that services satisfying the retrieval conditions exist in an extremely large number in a retrieval range set in the conditions. In this case, information on the extremely large number of service is returned to the user. The user having received such a retrieval result resets a retrieval range or changes the retrieval conditions to request a retrieval service again in order to narrow down the information.

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Therefore it would have been obvious to one of ordinary skill at the time the invention was made to have modified Wolff to include the steps of providing address information and installation position information of server based on the Background of the Application. Both inventions are directed towards providing a service. A skilled artisan would have been motivated to do so in order to allow a user to obtain a specific service [Background, page 3 lines 20-28 to page 4 lines 1-2]. Which allows for wanted and needed services for users of the system while avoiding unwanted services.

**Claim 9:**

Wolff modified with Background and Hattori disclose **the service retrieval apparatuses according to claim 8 and furthermore disclose, wherein, when it is judged by said retrieval result judgment means that the number of services included in the retrieval result has not reached the lower limit number of services set as the judgment criteria, said retrieval means changes the retrieval conditions according to the request from said client so as to be wider and performs retrieval again** [Hattori discloses using retrieval parameters which reflect the user's retrieval strategy (judgment), the system modifies parameters, generates a new retrieval expression and, based on this retrieval expression, executes retrieval again so that the user's retrieval strategy and background knowledge can be reflected (Hattori, Col. 7 lines 25-35), and further discloses a retrieval result obtained by information retrieval on a trial and error basis shows that the condition is "less restrictive" or "too restrictive". A "less restrictive" condition returns more data items than are expected by the user (Hattori, Col. 1 lines 38-47). ].

**Claim 10:**

Wolff modified with Background and Hattori disclose **the service retrieval apparatuses according to claim 9, wherein said retrieval means performs retrieval with respect to a new retrieval range excluding the range for which retrieval has already been performed** [Hattori, Col. 1 lines 38-47. "less restrictive" condition returning more data items than are expected by the user. In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items. And a "too restrictive" condition returning less data items than are expected by the user." (i.e. retrieves at different ranges with different retrievals.) ]

**Claim 11:**

Wolff modified with Background and Hattori disclose **the service retrieval apparatuses according to claim 8, wherein, when it is judged by said retrieval result judgment means that the number of services included in the retrieval result has exceeded the upper limit number of services set as the judgment criteria, said retrieval means changes the retrieval conditions corresponding to the request from said client so as to be narrower and performs retrieval again** [Hattori, Col. 1 lines 38-47. "less restrictive" condition returning more data items than are expected by the user. In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items.].

**Claim 12:**

Wolff modified with Background and Hattori disclose **the service retrieval apparatuses according to claim 11, wherein said retrieval means performs retrieval with respect to a**

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**new retrieval range excluding the range for which retrieval has already been performed**

[Hattori, Col 7 lines 25-35. new retrieval of results based on new conditions].

**Claim 13:**

Wolff modified with Background and Hattori disclose **The service retrieval apparatuses according to claim 12, wherein said retrieval means performs narrowing-down retrieval of the range for which retrieval has already been performed** [Hattori, Col. 1 lines 38-47, "less restrictive" condition returning more data items than are expected by the user. In this case, the user must specify a more restrictive retrieval condition to reduce the number of data items.]

**Claim 14:**

Wolff modified with Background and Hattori disclose **the service retrieval apparatuses according to claim 8, further comprising reply means which rearranges the result of the retrieval by said retrieval means based upon values with respect to attribute items included in the retrieval conditions, and then returns the retrieval result to said client** [Hattori, Col. 11 lines 39-61. The retrieval request input section 110 has a retrieval request consisting of an attribute, the value of the attribute (keyword), and its importance degree. There exists a conceptual hierarchy 310 of the attribute 1 as the background knowledge corresponding to the attribute 1 and, in the conceptual hierarchy 310, there are low level attribute values--"apple", "strawberry", and "pear"--of the attribute value "fruit" therefore there is an arrangement of values of attributes.].

***Conclusion***

*The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicants disclosure.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Pham whose telephone number is (571)272-3924. The examiner can normally be reached on Monday - Friday 8am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean R. Homere can be reached on 571-272-3780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in dark ink, appearing to read 'Debbie Le', with a horizontal line drawn underneath it.

Michael Pham  
Art Unit 2167  
Examiner  
01/19/2006

Debbie Le  
Art Unit 2168  
Primary Examiner  
01/19/2006